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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,631	02/22/2002	Paul Marie Pierre Spruyt	902.553-1	6182

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EXAMINER

PEZZLO, JOHN

ART UNIT	PAPER NUMBER
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2662

6

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,631

Applicant(s)

SPRUYT ET AL.

Examiner

John Pezzlo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

1. The amended specification was not entered and the original specification is objected to because this application is a continuation of application 08/844,383 (now US Patent 6,370,156 B2) and the specification needs to be the same as the parent case.
2. The first paragraph of the specification needs to state that this case is a "continuation of application 08/844,383 now US Patent 6,370,156 B2".

Appropriate correction is required.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 10-18 been renumbered 4-12 and the original claims 1-3 have been canceled.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

I. Claims 4-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7, and 11 of U.S. Patent No. 6,370,156 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 4, 6, and 10 of the application and claims 1, 7, and 11 of the patent both disclose multiplexing data and a pilot onto a carrier in order to enlarge the bandwidth for the transmission of data elements.

The patent does not disclose expressly a DSL system in the claims. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the system of the patent for a DSL system. The suggestion/motivation being that the patent discloses data elements and a pilot carrier which is also in a DSL system and the DSL system is increasing the data rate for subscribers on the local loop over conventional modems. The benefit being that the data rate for the users can be increased (enlarged bandwidth) due to utilizing the pilot carrier for data transmission.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

II. Claims 4 -12 are rejected under 35 U.S.C. 102(e) as being anticipated by Timm et al. (US 6,055,268) hereinafter Timm.

1. Regarding claims 4, 6, and 10 – Timm discloses a method and transmitter and receiver that utilizes VDSL modems, refer to Figure 2f and column 13 lines 60 to 67 and column 14 lines 1 to 10.

Timm discloses that data elements modulate at least one carrier, refer to Figure 4a and column 2 lines 56 to 67 and column 3 lines 1 to 33 and column 19 lines 23 to 55.

Timm discloses that a pilot carrier used for synchronization is multiplexed with at least one carrier, refer to column 5 lines 26 to 47 and column 10 lines 20 to 25 and column 29 lines 25 to 55.

Timm discloses that the pilot and the data elements are multiplexed to enlarge the bandwidth, refer to column 7 lines 50 to 60.

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2. Regarding claims 5 and 7 – Timm discloses that the data elements are scrambled, refer to column 27 lines 55 to 67 and column 28 lines 1 to 10.
3. Regarding claims 8 and 11 – Timm discloses that the transmitter and the receiver utilize ADSL modem, refer to Figure 2a and column 1 lines 44 to 67 and column 2 and column 3 lines 1 to 45 and column 5 lines 58 to 65.
4. Regarding claims 9 and 12 – Timm discloses that the transmitter and the receiver utilize VDSL modem, refer to Figure 2f and column 13 lines 60 to 67 and column 14 lines 1 to 10.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (703) 306-5420. The examiner can normally be reached on from 8:30 AM to 4:30 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D.C.

or faxed to:

(703) 872-9306. For informal or draft communications, please label

"PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Receptionist (Sixth floor)

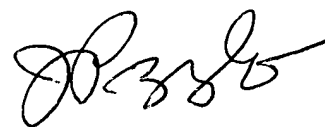
Crystal Park 2

2121 Crystal Drive

Arlington, VA.

John Pezzlo

18 February 2004



JOHN PEZZLO
PRIMARY EXAMINER